

Guest Editorial

Are There Distinctive Situations in the Evaluation of Neonatal Jaundice in the Yellow, Black and White Race?

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Hyperbilirubinemia (jaundice) is defined as the increase in bilirubin plasma level to stain the skin and sclera yellow.¹

Neonatal jaundice progresses from head to toe, first starts from the infant's head region, moves downward and spreads to the legs and feet. It can be used in the estimation of bilirubin level. The visual assessment of jaundice is not an effective method alone in estimating serum total bilirubin (STB) concentration for reasons such as the change of skin color among the races, differ among observers, and the fact that it has not yet stored in the skin at rapidly increasing bilirubin levels. However, the use of noninvasive methods such as inspection and transcutaneous bilirubin (TCB) is of great importance since it leads to the early start of treatment and reduces infection risk compared to invasive procedures. Skin color tone may give misleading results in inspection. Therefore, health professionals should be encouraged to assess jaundice by looking at the skin color, nasal mucosa, gums and examining the infant's eyes.

Before discharge, mothers should be informed that they should take their infants to the hospital when infants have a yellowing skin beyond the foot color.² Especially in dark-skinned infants, the gums should be assessed probably with an icterometer (image 1).³ The observation of stool is also an important aspect of the assessment. Parents should be trained to recog-

nize stool color, and the stool color scheme should be given. In the studies carried out, it was emphasized that skin color had no effect on nomogram in the assessment of jaundice with TCB, however, TCB nomogram should be developed specific to each culture.⁴ Mobile phone applications such as BILL CAM (using mobile phones to monitor newborn jaundice) that have been recently used in the assessment of jaundice will make a significant contribution since they are easily accessible and can be used in infants with different skin color (image 2).⁵



Image 1: Assessment with Icterometer



Image 2: Different Color Skin Assessment

Important points in the assessment of jaundice by noninvasive methods in different races were mentioned in this article. However, since the studies on this subject that health professionals can use are very limited, it was intended to draw attention to the need for evidence-based studies.

References

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